



Diane Salkie/R2/USEPA/US

05/22/2006 02:44 PM

To Andrew Confortini/R2/USEPA/US@EPA

cc

bcc

Subject Fw: TST recommended values for VI in NJ

----- Forwarded by Diane Salkie/R2/USEPA/US on 05/22/2006 02:44 PM -----



Robert

Runyon/R2/USEPA/US

03/30/2006 01:58 PM

To Joseph Hudek/R2/USEPA/US@EPA, Diane Salkie/R2/USEPA/US@EPA

cc Linda Mael/R2/USEPA/US@EPA, Jennifer Feranda/R2/USEPA/US@EPA

Subject Fw: TST recommended values for VI in NJ

Joe and Diane, Please look this over and let's discuss at your convenience. Thanks.

----- Forwarded by Robert Runyon/R2/USEPA/US on 03/30/2006 01:57 PM -----

Vince

Pitruzzello/R2/USEPA/US

03/30/2006 01:15 PM

To Joe Rotola/R2/USEPA/US@EPA, Eric Mosher/R2/USEPA/US@EPA, Eric J Wilson/R2/USEPA/US@EPA, Robert Runyon/R2/USEPA/US@EPA, Dave Mickunas/ERT/R2/USEPA/US@EPA

cc michael sivak

Subject Fw: TST recommended values for VI in NJ

FYI

----- Forwarded by Vince Pitruzzello/R2/USEPA/US on 03/30/2006 01:14 PM -----

Michael Sivak/R2/USEPA/US

03/30/2006 11:59 AM

To George Pavlou/R2/USEPA/US@EPA, Bill McCabe/R2/USEPA/US@EPA, Carole Petersen/R2/USEPA/US@EPA, Jeff Josephson/R2/USEPA/US@EPA, Bob McKnight/R2/USEPA/US@EPA, John Prince/R2/USEPA/US@EPA, Kim OConnell/R2/USEPA/US@EPA

cc Vince Pitruzzello/R2/USEPA/US@EPA, John LaPadula/R2/USEPA/US@EPA, Angela Carpenter/R2/USEPA/US@EPA, Charles Nace/R2/USEPA/US@EPA, Marian Olsen/R2/USEPA/US@EPA, Chloe Metz/R2/USEPA/US@EPA, Julie McPherson/R2/USEPA/US@EPA

Subject TST recommended values for VI in NJ

All,

Now that VI results are coming in for our New Jersey sites, the risk assessors thought it would be helpful

to present our NJ matrices for your review.

Attached, please find two tables that contain the recommendations for TCE and PCE indoor air and subslab soil gas trigger levels for use in New Jersey. The tables utilize risk-based concentrations that are presented in New Jersey's Vapor Intrusion Guidance (found in Table G-4 of that document), which have been plugged into our carcinogenic decision matrix, combined with an attenuation factor of 10. This is the same approach that has been approved for use by George and Bill in NY with minor modifications (see below). Once everyone agrees on the values to use, we recommend a meeting with NJ representatives, similar to what was done with NY, to ensure that everyone is aware of our approach.

Although the approach is similar to the approach we have been using for NY (i.e., using the state values in our matrix), there are several differences between the two states.

(1) NJ has adopted the USEPA risk-based values, however for some compounds they have defaulted to the detection limit for their indoor air value. TCE and PCE both fall into this category with indoor air detection limits of 3 ug/m³. Due to recent analytical advances that can now achieve lower detection limits, it didn't make sense to use the detection limits of 3 ug/m³, so the actual risk-based values presented in the NJ guidance were used in the example matrices that are attached. Upon speaking with a risk assessor from NJ, we were informed that efforts are underway to reduce the detection limit for TCE and PCE within the next year, which will allow the actual risk-based values to be utilized. Thus, it is our recommendation that the risk-based values be used for addressing sites in NJ.

(2) NJ has also adopted an attenuation factor for subslab to indoor air of 1:50 (or 0.02) which is different from USEPA's default attenuation factor of 1:10 (or 0.1), which is presented in the draft VI guidance from 2002. In order to remain consistent with our approach in NY, we recommend that we retain the attenuation factor of 1:10. If the updated VI guidance comes out with a change in the default, we'll deal with that when the time comes.

(3) NJ presents risk-based values that are equivalent to the 10⁻⁶ cancer risk level while the values presented for TCE and PCE in NY are roughly equivalent to the 10⁻⁴ value. This was resolved by placing the NJ value in the 10⁻⁶ indoor air box, while the NY values were placed in the 10⁻⁴ indoor air box of the matrices.

These differences do not result in drastically different values, although nominally they are a bit different:

Subslab concentrations

Compound	No action		Collect Indoor Air Sample		Remediation Warranted	
	TCE	PCE	TCE	PCE	TCE	PCE
NY	< 2.7 ug/m ³	<100 ug/m ³	>2.7-50 ug/m ³	>100-1000 ug/m ³	>50 ug/m ³	>1000 ug/m ³
NJ	<2 ug/m ³	<30 ug/m ³	>2-20ug/m ³	>30-300 ug/m ³	>20 ug/m ³	>300 ug/m ³

Please note that the 2 ug/m³ is rounded up from our risk-based value of 1.6 ug/m³; NJ uses the rounded value, so that's what we are using in the matrix.

In order to make our decisions a bit more consistent, we can also look at the "Collect Indoor Air Sample" in this way: In NY, we collect indoor air samples for PCE at 100 ug/m³. In NJ, we could say that above 100 ug/m³, we will collect indoor air, and we will look at site-specific information when subslab results are between 30 - 100 ug/m³ before this decision is made. (Site-specific information would include how many homes had results in this range relative the number sampled, do we have a good understanding of the nature and extent of contamination, etc.) This might give more comfort to people that we are not doing anything more stringent in NJ than we are in NY.

Please let us know if you'd like to meet and discuss this, or if you have any comments or questions. We currently have subslab data back from the Rockaway site, and subslab results from several other

sites are due in shortly. Decisions on when to sample indoors and when to expand the subslab investigations into additional homes/buildings need to be made very quickly.

We would also be willing to meet with any RPMs or SCs to talk about how to use these and what it all means. Thanks!



TCE Matrix with NJ risk-based values.pdf



PCE Matrix with NJ risk-based values.pdf

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* RESAMPLE

* ACTION MEMO

* ATTORNEY (TUESDAY
WEDNESDAY)

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